Amendments to the Specification:

Please replace the insertion on page 1, with the following amended paragraph:

"REFERENCE TO RELATED APPLICATIONS

This application is a national phase application under 35 U.S.C. 371 of PCT/CA99/00292 filed April 7, 1999, which claims priority from US Patent Application No. 09/055,765 filed April 7, 1998 (now US Patent No. 6,344,202)."

Please replace the paragraph beginning at page 8, line 1, with the following rewritten paragraph:

"Figures 10A to 10F show ~~Figure 10 shows~~ a comparison of the amino acid sequence of MOMP sequences (SEQ ID NOS: 1 to 15) from a variety of serovars of *C. trachomatis*. Residues which are identical to serovar E MOMP are represented by dots. The four VDs (VDI to VDIV) and the conserved cysteines are boxed by solid line. The conserved position where one cysteine is located in all *C. trachomatis* and *C. pneumonitis* MOMP sequences, but where one serine is located in GPIC and Mn MOMPs, is boxed by a broken line. Numbers above boxes denote amino acid residues of serovar E MOMP only."

Please replace the paragraph beginning at page 8, line 22, with the following rewritten paragraph:

"Any convenient plasmid vector may be used for the MOMP gene fragment, such as pcDNA3, a eukaryotic II-selectable expression vector (Invitrogen, San Diego, CA, USA), containing a cytomegalovirus ~~cyotmegalovirus~~ promoter. The MOMP gene fragment may be inserted in the vector in any convenient manner. The gene fragments may be amplified from *Chlamydia trachomatic* genomic DNA by PCR using suitable primers and the PCR product cloned into the vector. The MOMP gene-carrying plasmid may be transferred, such as by electroporation, into *E. coli* for replication therein. Plasmids may be extracted from the *E. coli* in any convenient manner."

Please replace the paragraph beginning at page 9, line 17, with the following rewritten paragraph:

"The data presented herein also demonstrate the importance of selection of an antigen gene fragment for DNA immunization. As described in the aforementioned WO 98/02546, the antigen gene elicits immune responses that are capable of stimulating recall immunity following exposure to the natural pathogen. In particular, injection of a DNA expression vector encoding the major outer surface protein (pMOMP) or fragment thereof but not one encoding a cytoplasmic enzyme (CTP synthetase) of *C. trachomatis*, generated significant protective immunity to subsequent chlamydial challenge. The protective immune response appeared to be predominantly mediated by cellular immunity and not by humoral immunity since antibodies elicited by DNA vaccination did not bind to native EBs. In addition, MOMP DNA but not CTP synthetase DNA immunization elicited cellular immunity readily recalled by native EBs as shown by positive DTH reactions."

Please replace the paragraph beginning at page 11, line 14, with the following rewritten paragraph:

"Another, possibly more feasible, way is to design a multivalent vaccine based on multiple MOMP genes. The latter approach is justified by the fact that the inferred amino acid sequences of MOMP among related serovars is relatively conserved (see ~~Figure 10~~ Figures 10A to 10F) and the repertoire of *C. trachomatis* gene variants appears to be finite (ref. 16)."

Please replace the paragraph beginning at page 22, line 30, with the following rewritten paragraph:

"Balb/c mice were immunized in the quadriceps three times at three ~~at a three~~ week intervals with 100 μg of pCV1, pCV2, pCV3, pCV4 and pCD5 DNA, following the procedure described in Example 2."